

Idemitsu, Sony Achieve World's Highest Level Of Luminous Efficiency For Blue Fluorescent

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Idemitsu Kosan and Sony today announced the achievement of 28.5% internal quantum efficiency (IQE) in deep blue fluorescent OLED devices, the world's highest level of luminous efficiency for this technology.

This ground-breaking development is a result of Idemitsu's advanced OLED material technologies and Sony' OLED device expertise, brought together by the two companies' joint development agreement. This joint agreement has led to the development of a wide range of high-performance OLED materials that have been incorporated in Sony products, and going forward both Idemitsu and Sony will also consider various practical applications for this newly developed, world-leading blue OLED technology.

Previous fluorescent OLED devices were limited to a maximum 25% IQE, however the implementation of new carrier transport materials and optimized device structure has led to the achievement of 28.5% IQE. Furthermore, the use of Sony's proprietary "Super Top Emission" OLED device technology has enabled blue color deepness (CIE chromaticity: 0.137, 0.065) exceeding NTSC standards to be achieved.

With this technology significantly reducing the driving current of blue OLEDs, the most energy-intensive of the three primary RGB colors, it is expected to significantly reduce the power consumption of OLED

panels, contributing to the future development of large-size OLED TVs.

These results will be presented at "SID2008" (Society for Information Display) to be held from May 18th, 2008 at Los Angeles, CA, U.S.A..

Source: Sony

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